

INDEX OF SURGICAL PROGRESS.

GENERAL SURGERY.

I. Communications from the Surgical Clinic of the University of Tokio, Japan. By Prof. J. SCRIBA. *a.* The first of this series of papers contains a contribution to the knowledge of the *etiology of acute myositis*. The author gives four cases, in all of which multiple inflammatory processes in the striated muscles suddenly appeared, after a slight suppuration, in the form of an abscess or furunculus, had been developed in the skin or mucous membrane, and while the process of reparation was going on. This acute inflammation of the muscular substance proper would, under proper and sufficiently early treatment, pass away again, or else lead to suppuration and finally heal without detriment to the muscle, regeneration having taken place.

The author believes the disease arises from some condition of the blood and is occasioned by the invasion of micro-organisms, in a manner analogous to that of acute osteomyelitis, the product of the inflammation being either serous or purulent in character. He suggests the term "infectious myositis" for the affection. The symptoms consist in a hard swelling, preserving the exact shape of the muscle, which is itself painful to the touch, and the surrounding parts of which show no sign of sensitiveness nor inflammation.

b. Elongation of a muscle by means of pedunculated muscle-flap. In an old case of compound fracture of both bones of the fore-arm which had healed with contracture of the flexors of the fingers and cicatricial involvement of the tendons, the author, after making incision, united several severed tendons, which had remained ununited, but found that the extensor digitor. commun. muscle could not be united to its tendon on account of loss of substance of the latter. So as to elongate the muscle, he therefore divided it in its upper portion trans-

versely half way through, and splitting the muscle longitudinally for some distance down, turned the flap thus formed back and united its (proximal) end to the free end of the tendon. Union took place by first intention, and free motion of the fingers was made possible.

The author is of opinion that such plastic operations could not be done with healthy muscles ; but in this case the muscle was hard and shrunken.

c. On peculiarities of the Japanese skull due to race, as affecting surgical methods of operation. In performing the operation of excision of the superior maxilla, the author found the fossa pterygo-palatina too narrow to admit a small straight saw in order to pass it through the foramen speno-palatinum and found it necessary to divide the alveolar process off from the superior maxillary bone. On examination he further found that this anomaly was one of race, the patient being Japanese. He therefore describes the differences of skull-formation between the Caucasian and Mongolian race. He advocates performing the resection of the superior maxillary bone after O. Weber instead of after v. Langenbeck. In the latter case the saw must be introduced into the apertura pyriformis (in operations upon Japanese subjects) in order to sever the alveolar process from the body of the bone.

The operation of *resection of the second branch of the fifth nerve* likewise demands some modification when the patient is Japanese, and, not only for such cases but for Europeans as well, the author recommends the following method :

The first incision is to be made through the skin and tissues including the periosteum down to the bone commencing a little below the external palpebral ligament and extending perpendicularly downwards to the lower margin of the zygomatic process of the superior maxilla. A second incision is then carried from the upper end of the first one to the middle of the zygomatic process of the temporal bone, also severing all the tissues excepting the temporal muscle in the middle portion. After dividing the periosteum, the zygomatic bone is then to be separated from the skull, its union with the superior maxilla being divided with a chain-saw, the zygomatic process of the temporal bone being cut through with a chisel. The whole flap, together with the

loose zygomatic bone. can then be turned downwards, the margins of the inferior orbital fissure chiseled off, and thus access gained to the foramen rotundum. The nerve is then to be drawn out and cut off, and the flaps replaced.

He further advises a modification of *infra-orbital neurectomy* after v. Langenbeck for Japanese subjects. After exposing the point of egress of the nerve (for. infra-orb.) the author inserts a long, narrow blade of a scalpel (instead of a tenotome) close to the lateral part of the inferior orbital margin 2.5, or 3.5 centimetres into the orbita, keeping close to the external wall, and then, lowering the point, divides the parts in the fissure. The nerve can then be extracted through the infra-orbital foramen.

d. Contributions to the etiology and therapy of aneurysms. The author treated seven cases, six of which were cured or improved, and one of which died, which had been treated by Reid's method of compression. He is in favor of operative treatment, generally speaking.

In Japan the disease is frequently caused by *endarteritis syphilitica*, the pathological anatomy of which the author describes in detail. He suggests the following method of treatment:

Indirect compression should be tried in all cases, if necessary with the assistance of narcosis. If a nurse can be had, digital compression after Burke-Esmarch, if not, instrumental compression with a stick or Bulley's apparatus is to be used. Uninterrupted elastic bandaging after Reid is considered very dangerous but very effective, and perhaps more suitable for traumatic aneurisms than for other kinds.

In all cases in which compression fails, Anel-Hunter's ligature at the nearest healthy point to the sac is recommended.

Extirpation of the sac is indicated (1) in rupture of the aneurism; (2) in all arterio-venous aneurysms, if after ligature at a central point the pulsation and bruit continue; (3) in cases where Anel-Hunter's method is not successful, or where there is any recurrence; (4) in aneurisms of small arteries; (5) in arterial angiomata.

Ligature of the efferent vessels after Brasdor-Wardrop is to be performed only when a central point cannot be reached, and all efferent branches are accessible.

For ligatures the author prefers silk which has been boiled for ten

minutes in a 1 per cent solution of corrosive sublimate, and preserved in the same solution until used, and then rubbed with iodoform powder.

The author publishes thirteen pages of tables showing the results of different methods of treating aneurisms, and adds an extensive list of the literature of the subject.—*Deutsch. Zeitschr. f. Chir.* Bd. 22. Hft. 5 and 6. Octob. 1885.

II. Contributions from the Mansfeld Hospital for Miners at Hettstedt. By Dr. HILDEBRANDT. He gives his experiences during the year 1884 in the above named hospital, and publishes the more interesting cases occurring during this time, representing chiefly injuries and accidents to miners.

Sawdust as a Wound-Dressing.—As a former assistant of Volkmann, he had essayed dressing the wounds in the same manner at Hettstedt as he had been accustomed to do at Halle; but being somewhat limited as to means, he found he had to abandon expensive dressings, and, instead, adopted sawdust, and with capital results. He had the sawdust sifted, then steamed in a closed box for several hours, and finally moistened with a two-pro-mille sublimate solution. This he applied to the wound, wrapped in sublimated gauze.

In this manner he treated sixty major surgical operations, including nine compound fractures, and only once disturbance occurred in the course of healing, erysipelas having set in through the patient's opening the dressing.

Four tuberculous and osteomyelitic foci were treated with scraping out and application of Pacquélin's cautery. Skull-fractures all ended fatally excepting one, which was trephined. The indication in this case was not given by a depression, but a few hairs were observed in a fissure. The author expresses himself in favor of trephining, even when no great depression is present, if the fissure appear in the least unclean or liable to become septic.

One laparotomy for removal of gall-stones in the gall-bladder was successful.

Five cases of nerve-stretching with good results are recorded, and one case of ligaturing the external iliac artery and vein at the point of

union with the common iliac did excellently.—*Deutsch. Zeitschr. f. Chir.* Bd. 22. Hft. 5 and 6. October. 1885.

W. W. VAN ARSDALE (New York).

NERVOUS AND VASCULAR SYSTEMS.

I. **Nerve-Suture.** By Dr. NICAISE (Paris). The case is reported of a young woman, who accidentally severed the median nerve at the wrist by falling through a window. The wound healed in eight days; but, from the time of the injury, there were anæsthesia and paralysis of motion in the parts below supplied by this nerve. Six weeks after the accident she entered the hospital. The scar was tender, and pressure on it caused tingling and numbness in the outer half of the hand.

The cut ends were found to be bulbous, and so markedly degenerated that a considerable ablation of nerve was required in order to reach healthy tissue. The freshened extremities were brought together by fine catgut stitches, passed from the sides of the proximal portion to the lowest level of its cut surface, and by tracks symmetrical with these through the distal portion. The Lister dressing was applied, and the parts immobilized in a plaster splint.

The pain was at first severe, preventing sleep. Sensibility began to appear in the thumb the next day, and improvement continued so rapidly that the patient was discharged on the thirteenth day, able to use considerably the previously crippled hand. Four months afterwards the parts which had been anæsthetized were sensitive to pricks, but not to the touch of a blunt object. There was no pain in the limb; but when the thumb was pricked, not only was the impression felt at the point touched, but a pain was experienced in the shoulder.

Nicaise believes that immediate union of nerve filaments does not occur in man. Degeneration takes place in the parts of a nerve peripheral to its section, though it is held by some pathologists that not all the axis-cylinders are involved in this process. In this case union and partial restoration of sensibility were achieved long after the receipt of the wound, and when degeneration obviously had occurred. Though suture undoubtedly had a salutary effect on the distal parts, it could not by itself have induced regeneration so rapidly. Brown-Se-

guard asserts that the irritation of the central end in the process of suturing increases the functional activity of the anastomotic nerve filaments which supply the uninjured trunks, and are distributed to the paralyzed parts. Though any irritation of the central parts may answer the purpose, the surgeon should select that which is demonstrably the most certain and permanent, namely, suture, which, thanks to the antiseptic method, is free from danger.

Tripier criticises this theory. To his mind neuritis alone explains the phenomena, which he analyses with great skill and force. He agrees, however, that suture should be performed at as early a date as possible after the injury. *Rev. de Chirurg.* 1885. No. 7.

F. H. GERRISH (Portland).

HEAD AND NECK.

I. On Operations for the Removal of Adenoid Growths in the Naso-Pharynx. By Dr. J. GOTTSTEIN (Breslau). There are three methods for the operative removal of adenoid growths in the naso-pharynx, apart from those employed for their destruction by caustic means and the galvano-cautery, namely, (1) by the snare, (2) by the forceps, (3) by the curette. Up to the present the removal with the curette, especially that of Lange, seems to have found most favor. The author has constructed an instrument which has, he thinks, some advantages over those in present use. To a handle of wood, 10 ctm. in length, is affixed a shaft of steel, 7 ctm. long, the end of which is pear-shaped and fenestrated, and bent to nearly a right angle to the shaft. There is a slight upward curvature in the shaft close to this pear-shaped end. The latter is 3 ctm. in height and 2.5 ctm. in width at its broader or upper part, its outer surface, i. e., that which comes in contact with the pharyngeal wall, being flat and smooth, whilst the inner upper edge of the window-like opening is sharpened. The manner of operating with the instrument is as follows:

The tongue being depressed, the instrument is passed under the velum, and its end pressed firmly against the pharyngeal wall, at the place where it is desired to operate. By so doing the adenoid growths are squeezed through the fenestrated end of the shaft, when, by a firm traction downwards, they are shaved cleanly off. This procedure

may be repeated several times without withdrawing the instrument, although the author agrees with Simon, that it is better not to attempt too much in one sitting. The instrument is also useful in excising Luschka's tonsils. It differs essentially from the instruments of Lange or Meier, inasmuch as those are simply curettes, whereas that of the author acts on the principle of a tonsillotome or laryngo-guillotine. Tearing of the mucous membrane is avoided by the clean cutting of the sharp edge, the hæmorrhage is usually slight, as is also the reaction. The author uses no chloroform, and rarely has any assistance in operating.—*Berliner klin Wochenschrift*. No. 2. Jan. 11.

II. On Blood-Cysts of the Lateral Regions of the Neck. By Prof. Dr. GLUCK (Berlin). In a paper read before the Berlin Medical Society on November 18, 1885, the author, after touching somewhat on the etiology of these blood-cysts, described a case operated by himself, in which the results were most favorable. Blood-cysts, he says, are tumors, which contain only fluid blood, communicating directly with some large vein; they may be emptied by pressure and quickly refilled on removal of the latter. It happens sometimes that a cystic ectasia takes place in the centre of a pharyngeal arch, both ends of which have become obliterated. Such seems to have been the origin of the case here reported, although its character was changed to that of a blood-cyst through the communication existing with the common jugular vein, a fact, he says, heretofore unobserved, the contents of such pharyngeal-arch cysts being usually of a serous or mucous character. The sac itself was formed of connective-tissue, having a roughened, wart-like inner-surface. The papillary excrescences on this inner surface consisted, microscopically, of villi, which somewhat resembled, at first sight, those of the intestinal tract, and were covered with cylindrical epithelium, stratified.

The patient, a girl, æt. 16, had first noticed the swelling some ten years previously, and had remarked that its size varied at times and that it appeared to be erectile. The tumor was easily compressible, filled up again quickly on removal of the pressure, and on puncturing, was found to contain pure blood. When Valsalva's experiment was performed, a bluish swelling in the lateral region of the neck was easily observed. The free communication with the common jugular

vein rendered ligature of the latter necessary before removing the cyst, which was successfully accomplished according to Wolff's method. A large hæmorrhage from the jugular was controlled by ligating its central end, which had been dissected free, in case this emergency should arise. Tampons prepared in iodoform-ether were used, and under this treatment the wound healed rapidly. No relapse occurred. A similar case was operated by von Langenbeck in 1880, which has never been published. The sac here was a varicose ectasia of the wall of the vein (common jugular). The author's case is the nineteenth which has been reported, and the sixth in which the operation proved successful. It is an interesting case from many standpoints. The difficulties in operating were great, the operation lasting three hours. The unusual character of the cyst and its communication with the jugular make it interesting, as the latter fact would tend to show that in all probability numerous blood-cysts of the neck are of congenital origin and really pharyngeal-arch cysts. The case may also be regarded as of still further importance, inasmuch as we find that no coagulation of blood, flowing over a surface rough with wart-like excrescences, etc., took place; but that it was, on the contrary, in a perfectly fluid state, as was clearly demonstrated by the violent squirting after incision of the sac. This is contrary to the generally accepted theory of Brücke, according to which all elements excepting the normal endothelium of the interna, act as foreign bodies in the blood-channels, causing coagulation of blood in their neighborhood.

Operations on blood-cysts are, technically speaking, among the most difficult in surgery. The danger, however, with proper observance of antiseptic measures, is not great. Extirpation of such cysts is indicated in cases where their size is large, causing inconvenience by pressing on the nerves, trachea, etc. The author furthermore believes that their extirpation is necessary from a prophylactic standpoint, inasmuch as from the proliferating epithelium of these pharyngeal-arch cysts, a carcinoma may take its origin. Volkmann, rightly judging of the genesis of the latter, called them bronchogenous carcinoma.—*Deutsche Med. Wochenschrift*, No. 5. Feb. 4, 1886.

C. J. COLLES (New York).

III. Congenital Cyst of the Neck. By M. MONOD (Paris). M. Monod had treated by injection with liquid chloride of zinc a cyst of the neck, with viscous contents, in a little girl. Cure was accomplished at the end of a month, after sloughing of a considerable extent of skin. But in six months, a relapse ensuing, M. Dubar excised it by the bistoury, with some difficulty, owing to cicatricial adhesions. Another relapse in some months was treated by excision, and this time cure was established at the end of a year. This course is common in cysts of the neck, and the main interest of the case is in the histological details given by M. Dubar. The tumor removed after the first recurrence was formed by a sac sending into the depths of the neck a prolongation, closed at the bottom by a collection of epithelial cells, so that the caustic injection had been forcibly stopped—an arrangement showing the inefficiency of this mode of treatment. The small tumor removed at the second operation was a cyst lined by ciliated columnar epithelium, and having epithelial shoots ready to invade the neighboring tissues. M. Dubar hence concludes that the tendency to recurrence of cysts of the neck is due to the structure of their walls and their properties of pushing out epithelial prolongations. In consequence, their removal should be widely made beyond the limits of the tumor.

M. Monod restricted this last explanation as applicable only to cysts already operated on. For virgin cysts, *exact* and complete removal would be sufficient.—*Société de Chirurgie de Paris*. 22 July, 1885.

CHEST AND ABDOMEN.

I. Cases of Explorative Laparotomy. By M. LUCAS-CHAMPIONNIÈRE (Paris). **I. Tumor in the right side; explorative laparotomy; pedunculated hydatid cyst recognized and removed.** The patient had a tumor of which the diagnosis was obscure, but by elimination a tumor of the kidney was supposed. Laparotomy was performed on July 10, as the most certain and expert way to verify the diagnosis. The kidney of the opposite side, the integrity of which should always be determined before removing the unhealthy kidney, was found atrophied, while the right one, found with some difficulty,

was hidden behind the liver. The tumor, everywhere adherent, was fixed by a pedicle to the anterior border of the liver; it was removed without many difficulties, but a portion of the wall, too adherent, was left attached to a piece of intestine. It was a hydatid cyst of the liver, pedunculated. Several similar cases have been noticed recently. The patient, operated on twelve days ago, is going on well.

II. *Tumor of the right side; exploratory laparotomy; pyelo-nephritis recognized; nephrectomy twenty days after.* A woman admitted to the hospital with a large tumor in the right side, very painful and of difficult diagnosis; a nephritis or suppurated perinephritis suspected. A puncture gave issue to a litre of pus, but did not determine more precisely the diagnosis, and on May 21 an exploratory laparotomy was decided on. Pyelo-nephritis was recognized, and the abdomen re-closed; on the 13th of June the removal of the kidney was effected, through a slightly oblique incision behind the external border of the right rectus, the peritoneum being easily separated as far as the kidney; the size of which would have prevented removal by the lumbar method without costal section; the ureter and thickened fragments of the capsule were also removed. A slight tear in the peritoneum, caused during its separation, was sutured. Healing was complete without suppuration the twenty-first day; the patient passing 1,500 grammes of urine per day.—*Société de Chirurgie de Paris*. July 22, Aug. 19, 1885.

P. K. ABRAHAM (London).

EXTREMITIES.

I. *An Operation to Correct Deformity Resulting from Extensive Loss of Skin in the Arm.* By Mr. JOSEPH BELL (Edinburgh). Patient came to hospital requesting amputation for results of cicatricial contraction after phlegmonous erysipelas of arm. Mr. Bell determined to shorten the limb, instead. He removed the lower three inches of the humerus including the condyles. The result was a useful arm, with all the elbow movements, and now quite healed.—*Edinburgh Medical Journal*. Sept. 1885.

C. B. KEETLEY (London).

GENITO-URINARY ORGANS.

I. Two Rare Varieties of Rupture of the Bladder. By Dr. A. Pousson. The question is raised of the possibility of an absolutely spontaneous rupture of the bladder, that is, rupture without pathological alteration in its walls and without traumatism. The author adduces testimony to show that the tear may result from either the contraction of the abdominal walls on a full bladder, or the contractions of the walls of the bladder itself.

In support of the first explanation of the accident, cases are cited in which men lifting great weights felt a sudden pain in the hypogastrium, and could not urinate afterwards. Death speedily ensued, and rupture of the bladder was found at the necropsy. The violent straining with the abdominal muscles on a full bladder was the cause of the injury. The sphincters are held with peculiar firmness during muscular efforts, and thus the overload of urine cannot escape through the urethra. If there happens to be a stricture of the urethra, the danger is so much the greater.

The theory of the causation of rupture by the second method is upheld by a new view of the physiology of that viscus. It is maintained that the hypertrophied bladder-walls are as capable of spontaneous rupture as those of the heart and gravid uterus. In experiments on the heart, it is shown that the thinner walled cavities rupture most easily from external violence, but the thicker from their own contractions. The hypertrophy of the bladder on account of stricture may justly be compared to the hypertrophy of the heart arising from valvular lesion. Desnos has demonstrated that the contractions of an inflamed bladder are as sudden as those of striated muscles, and occur very frequently. Distention invites contraction; and when there is an obstacle to the discharge of urine, by way of the urethra, rupture occurs. Even for a long time after anæsthetization, these spasmodic and irregular contractions do not cease. Numerous cases are reported bearing upon this theory, notably one in the hands of Verneuil, where a gentle injection of only 125 grams was immediately followed by the bursting of the bladder; and one in which Guyon was preparing to perform hypogastric lithotomy. The latter had thrown 200 grams of boric solution into the bladder and 300 grams of fluid into the rectal balloon, but the

vesical globe did not appear. A little more fluid was injected into the bladder, and the hypogastrium was distended for a moment, but then suddenly became flat. Death occurred in twenty-two hours, and the necropsy showed the walls of the bladder to be 8 mm. thick, with an anterior perforation 12 mm. long.

The following classification is suggested :

{	Rupture healthy bladder.	{	Traumatic.	{	From direct cause.
					{
			By effort.		
{	Rupture diseased bladder.	{	By perforation.		
				By contraction of its walls.	

The term "spontaneous rupture" should be discarded, as it explains nothing and satisfies nobody. "Rupture from idio-muscular contraction" is suggested as a suitable substitute.

Rupture by the action of the muscular walls cannot be prevented by the surgeon in ordinary cases; but, by emptying their bladders, he can protect his patients against the danger of sudden contractions in the excitement period of anæsthetization. If there is a tight stricture and the bladder is full, hypogastric aspiration should first be practiced. No careful surgeon will puncture a bladder with the beak of a catheter; but it is possible for a bladder to contract upon the instrument and thus be perforated. That an irritable bladder can rupture itself should warn us against an approved surgical procedure—the distention of small and irritable bladders by forcible injections. Anæsthesia should be complete before any operation on the bladder, so that the liability to contraction may be reduced to a minimum. It is better to do lithotomy almost dry, and to replace supra-pubic lithotomy with perineal, than to subject a patient to much risk of rupture by distending an irritable bladder.

The prognosis is far less grave in extra- than in intra-peritoneal rupture. In the former case, if a free perineal opening is made in the bladder, the chance of recovery is greatly augmented.—*Rev. de Chir.* 1885. No. 11.

F. H. GERRISH (Portland).

II. Diagnosis and Treatment of Intra-Peritoneal Wounds of the Urinary Bladder. By A. W. STEIN, M.D. (New York). After calling attention to the great fatality of these lesions, referring to the fact that in the great majority of cases the coats of the bladder were healthy at the time of the injury, and that neither thickness of the vesical wall nor the absence of distension of the bladder were necessarily a safeguard against rupture, although usually efficient, he reviews the symptoms in detail: inability to walk or stand; severe pain over the epigastrium; incessant desire to micturate with inability to void the smallest quantity of urine, or possibly but a few drops mixed with blood, with constitutional symptoms of great prostration rapidly ensuing; the inconstancy and unreliability of the most constant symptoms are emphasized and the completion of the diagnosis is recommended by digital exploration, in the female through the short urethra and in the male through a small, median perineal incision. In case of a question between intra- and extra-peritoneal laceration, a supra-pubic incision will dissipate all doubt. Should the injury be extra-peritoneal, the incision will have done no harm, and should it be intra-peritoneal, it will have been the initial step to a laparotomy. Referring to the inutility, as curative measures, of catheterization, paracentesis of the recto-vesical cul-de-sac, and lateral cystotomy, he comes to laparotomy, the advantages of which are: (1) that it permits direct inspection of the seat of the lesion and the appreciation of concomitant injury to other parts; (2) that it permits the removal from the peritoneal cavity of extravasated urine and blood; (3) that it permits cleansing and disinfection of the peritoneal cavity, and (4) that it permits the accurate closure of the vesical wound, preventing further effusion of urine—thus meeting all the indications which may secure success.—*N. Y. Med. Rec.* 1886. Feb. 6.

J. E. PILCHER, (U. S. Army).

III. Three Cases of Suprapubic Lithotomy. By Dr. ORLOWSKI (Warsaw). The author calls attention to certain details of the operation of suprapubic lithotomy. Having encountered a case in which the peritoneal fold reached down as far as the pubic symphysis, he insists on the use of a grooved director in incising the abdo-

men, both because it lessens the danger of wounding the peritoneum and because it shortens the operation.

Instead of using hooks and retractors to hold the bladder in the wound, he passes a silk thread for the distance of 3 centimetres through the muscular layer of the bladder-wall, and uses it to draw up the bladder. The main advantage consists in the space gained for operating.

The suture of the bladder should be performed after Gély's method "*en piqué entrecoupée*," and not neglected, as in France. By means of the suture the after-treatment may be shortened by ten days, thirty instead of forty days being then only required for convalescence. He allows infiltration of urine to be the most frequent cause of death, but denies that it is more frequent after suture of the bladder-wound, than without it.

The following are the cases, which present considerable interest:

I. Patient *æt.* 70: great debility; chronic bronchial catarrh; enlargement of prostata; stone in the bladder. Lithotripsy unsuccessful on account of hardness of stone; next day (July 1) operation. Rubber bag in rectum filled with 440 ccm. water; bladder distended with 250 ccm. Incision through abdominal wall and bladder in median line, removal of stone. Two drainage tubes placed in bladder, and one in abdominal wound, which was closed with sutures. Lister's dressing. Evening temperature, 37°5 C.; 3d, dressed; 7th, sutures removed; 11th, tubes, having accidentally fallen out, left off, and catheter placed in bladder. General health very good; 13th, acute pneumonia; 22d, death. Wound was in good condition. No post-mortem.

II. Case of stricture of urethra, *æt.* 33. Patient having introduced elastic bougie, No. 14, fell asleep, and on awaking found it had entered the bladder, July 22; 28th, operation, similar to I., but that bladder-wound was sutured with catgut (Gély's suture); eight sutures. Catheter retained in bladder; 30th, catheter changed. August 1, wound dressed and catheter renewed. From 3d to 10th urine flowed through the wound; 12th, catheter removed; 17th, dismissed cured.

III. Patient *æt.* 64; lithotripsy one year and a half and again one

week previous to admission. Great pain and debility. Passes bloody urine every ten minutes. Temp. 39° C. Pulse 110, weak. Enlarged, painful prostate; cystitis; 30th March operated. Peritoneum descending nearly to symphysis. Bladder emptied of a stone and fragments of former stone. Suture of bladder with silk. Catheter left introduced. Iodoform dressings. Temperature 39° C. April 4th urine flows through wound. Dressings renewed daily. General improvement, temperature normal. April 9, catheter removed. May 5, abscess of scrotum incised; 10th, wound of abdomen closed, except a small fistula, which remained; 26th, dismissed, greatly improved.—*Deut. Zeitschr. f. Chir.* Bd. 23. Hft. 1 and 2. Dec., 1885.

IV. The Flaying of the Male Genital Parts. By Dr. O. KAPPELER. The author gives nine cases (among them two new ones of his own) of injury to the male organs consisting in the stripping off of the skin covering them. In all cases the patient was caught by some revolving piece of machinery, his clothes torn off, and with them more or less of the skin of the genital organs; only in one case these organs themselves were injured. No deaths occurred.

The object of the author is to throw some light on the prognosis and treatment of such accidents.

In his own two cases recovery ensued by the union of the inner membrane of the prepuce with flaps taken from the skin of the neighboring parts.

In case, then, that the internal lamella of the prepuce exists and can be turned back, with or without incision in the median line, and if there is sufficient skin of the scrotum or of the mons pubis present, to permit of a union with it, recovery progresses without further assistance, and without loss of urinary or genital functions.

If the skin of the scrotum and mons pubis be wanting, still a good recovery is possible, especially with the help of plastic operations, but the penis, though it may perform its functions, will be dwarfed—provided the internal preputial layer be preserved.

If the internal membrane of the prepuce be torn off as well, little is to be expected in the way of restitution. Hard cicatrices cripple the member and prevent coition. In these cases transplantation is moreover extremely difficult, as gangrene of the flaps almost always occurs.

As to injuries to the scrotum, a very little scrotal skin suffices to cover the testicles.

If no skin at all be present the testicles are gradually—in the course of a week—drawn up to the external inguinal ring by the action of the cremaster muscle. In this case the testicle may pass under the pubic skin, or heal by cicatrization, but it is also possible that the latter process is long delayed, and that cicatricial pressure necessitates the removal of the testicle.

Primary plastic operations are indicated, as soon as the entire skin of the scrotum has been torn away; secondary operations become necessary if the testicle remains without cicatricial covering.

In both cases of the author's coition was possible, but the generative functions had ceased on account of azoöspemia. The latter fact is difficult of explanation since no atrophy of the organs was noticeable.—*Deutsche Zeitschr. f. Chir.* Bd. 23, Hft. 1 and 2. Dec. 1885.

W. W. VAN ARSDALE (New York).

V. Alveolar Sarcoma of the Bladder; Operation. By Mr. Langton (St. Bartholomew's Hospital). The diagnosis of this case was made partly by the aid of the sound and partly by the character of the hæmaturia (sometimes absent, and always worse toward the end of micturition). After performing median urethrotomy, Mr. Langton was just able to reach and remove by the use of a steel scoop a tumor the size of a walnut, growing from the bladder wall one inch and a half behind the prostate. The patient, a man æt. 25, made a good recovery. The tumor was composed of a number of cell-containing alveoli.

The author remarks on the necessity for suprapubic incision in cases of tumor springing from the anterior wall, and also discusses the nature of the various forms of vesical new-growths. In his case the situation had been determined by the greater resistance to movement of the sound on the left side of the base of the bladder.—*Lancet.* Dec. 28. 1885.

J. HUTCHINSON, JUN. (London).

VI. Treatment of Spasm of the Sphincter Ani by Forcible Dilatation. By T. PRIDGIN TEALE, F.R.C.S. Speaking of the use of dilatation in painful ulcer of the anus (fissure) Mr. Teale says:

"It is now some twenty years or more since I first heard of the then new method of forcible dilatation of the sphincter ani as a substitute for division by the knife. From that time I have abandoned the knife, and have invariably employed dilatation alone."

The advantage of this mode of treatment Mr. Teale explains as follows: "In the first place, it has introduced a more exact, and, as it seems to me, a more scientific method of dealing with the variable conditions of sphincter which are found in such cases. The educated dilating fingers of the surgeon have a far better consciousness of the amount of resistance to be overcome, and of the degree of the relaxation to be demanded and attained, than can be attained by the use of the knife."

The second class of cases in which Mr. Teale dilates are pure cases of spasm of the sphincter, causing habitual constipation, long delay at the water closet, retention of flatus in the colon, and colicky pains in the left loin, *in which no fissure or ulcer can be discovered.*

The third, cases in which a ring of cartilaginous hardness is felt some distance from the anus, far more unyielding than the ordinary sphincter in fissure, and needing all the power of, sometimes proving almost too much for, the surgeon's fingers to break through.

The fourth class of cases is that of *slight internal bleeding piles.*

The fifth, cases of deeply extending fistula in which free division into the rectum would involve a risk of permanent incompetence of the anus. Here, after full dilatation, partial slitting up of the fistulous sinus, according to Mr. Teale, suffices. He says: "The enforced quiescence of the sphincter allows the rectal end of the sinus to heal. In attempting this, it is necessary to make the skin opening large, like the base of a triangle, of which the rectal end of the fistula forms the apex, care also being taken to vigorously scrape away all granular lining of the fistulous track by Lister's scraper or Volkman's spoon."

Lastly, Mr. Teale is of opinion that in all operations on the rectum and anus dilatation of the sphincter is an essential, almost an indispensable, element in the treatment.—*Med. Times*, Nov. 28, 1885.

BONES, JOINTS, ORTHOPÆDIC.

I. Treatment of Infantile Paralysis. By Dr. WILLIAM MURRELL (London). During the acute symptoms, which last generally three or four days from the onset of the attack, and are marked by febrile disturbance—an elevation of temperature of three or four degrees—the author advocates rest in bed in a darkened room and the lightest possible diet, such as peptonised milk, or milk and soda water. To cut short the fever he recommends tincture of aconite, four or five minims in two ounces of water, one teaspoonful to be given every hour for three hours, then every alternate hour until three more doses are taken, and subsequently every three or four hours until the temperature is normal. Convulsions should be treated by large doses of bromides by mouth or rectum.

When the acute stage is over the child is allowed to get up and is placed on a liberal diet.

Counter irritation is applied to the spine, either by small blisters or by tincture of iodine, and physostigma in one fiftieth of a grain dose of the extract taken three times a day, and the frequency of administration increased until one pill is taken every three hours. After the first six weeks the $\frac{1}{200}$ of a grain of phosphorus should be added to the physostigma; the use of these drugs should be continued for many months.

But the point of Dr. Murrell's treatment lies in the employment of massage, which should be used, not only to the spine and back, but to the paralyzed limbs. The methods known as *effleurage*, *friction*, *pétrissage* and *tapotement* are particularly recommended by him, and applicable in sittings of ten minutes each from once to six times a day.

The *rationale* of this line of treatment Dr. Murrell explains as follows: "It is true that we have to deal with a condition dependent, pathologically, on degeneration or destruction of the large multipolar ganglion cells of the anterior cornua, but if we can only keep up the nutrition of the parts in the affected limbs until other cells in the cord take on the function of those which are useless, the patient will be restored to health."

This keeping up the nutrition is evidenced by a rising of tempera-

ture in a limb after massage, and by the contraction of muscles by means of electricity, both of which points should be tested after every sitting.—*Lancet*. 1885. Dec. 26.

II. Treatment of Spurious Valgus in the Female. By F. KING GREEN (Bath). This consists in supporting the flattened instep directly from the hip, an India rubber accumulator being introduced to render the support elastic and equable.

The apparatus consists of a triangular shaped piece of stout jean, ten inches by three and a half, attached by its base *within* the shoe to the outer side, about half an inch above the junction of sole with outside leather. The sole of the foot rests upon this piece of jean, which, when tension is made upon it by the cord above, gives the requisite support to the arch of the foot. An extra stout, brown leather shoe-lace is now firmly bound to the apex of the triangular piece of jean below, and passed through a ring (the outstanding ring of a jack-rod) which projects from the garter, and still higher is connected by means of another ring with a piece of india rubber cord one third of an inch thick firmly fixed above to the front and back of the corset by a Y shaped piece of strong webbing. The amount of elastic support to the instep can be regulated to a nicety by the patient herself when attaching the boot lace to the ring of the elastic cord.

Mr. Green recommends a broad belt suspended from the shoulders by braces as a substitute in the male for the part played by the corset in the female.

The great advantage of Mr. Green's apparatus over any others that we are acquainted with for the treatment of flat foot, lies in this: the *amount* of support required can be regulated to a nicety by the patient herself, who can tighten or loosen the cord attached to the jean below at its point of junction with the ring of the elastic cord. This advantage cannot be overrated, and has been fully appreciated by the patients on whom I have applied the apparatus at the National Orthopædic Hospital in Great Portland Street, London.—*Lancet*. 1885. Dec. 26.

W. J. ROECKEL (London).

III. Non-union of Fractures with a Consideration of Some Modern Methods of Treatment. By G. R. FOWLER, M.D. (Brooklyn, N. Y.) Classifying the conditions under which non-union is found as (1) delayed union, (2) union through the medium of fibrous connecting bands and (3) pseudarthrosis, he proceeds to consider the etiology under the heads of (I) constitutional causes: (*a*) rachitis, (*b*) syphilis, (*c*) tuberculosis, (*d*) general carcinoma, (*e*) scorbutus, (*f*) pregnancy, (*g*) chronic alcoholism, and (*h*) acute infectious fevers; (II) local disturbances: (*a*) excessive comminution of the fragments, in which cases, ultimate non-union is uncommon and pseudarthrosis still more rare; (*b*) considerable displacement of the fragments, occurring from a failure in reduction or inefficient reduction, the callus from the two extremities of the bone not meeting; (*c*) interposition of soft parts between the fragments, a more common cause of non-union than formerly supposed; (*d*) too early moving of the fragments—here pseudarthrosis is most frequently found—and (*e*) cases for which no rational explanation can be found. The methods of treatment may be considered under two heads: (1) Non-operative methods, consisting of (*a*) rubbing the ununited ends together and applying a fixed dressing; (*b*) injection of irritating fluids or subcutaneous puncture, which are open to the objection of not being applicable to fractures in the vicinity of joints and (*c*) the "percussive method" of H. O. Thomas, consisting of percussing the parts about the seat of fracture with a small copper mallet faced with rubber for from five to ten minutes at a time at intervals of forty-eight hours or longer until undoubted evidence is afforded of a renewal of active hyperæmia and engorgement of the parts; it is believed that all cases of the first class and most cases of the second, when not due to constitutional causes, will be amenable to this treatment. (2) Operative methods, mainly directed to cases in which non-union is due to (*a*) longitudinal dislocation of the fragments and the occurrence of adventitious processes of the aponeurotic structures leading to muscular attachment above and below the false point of motion; (*b*) interposition of the soft parts between the ends of the fragments; (*c*) oblique fracture with smooth surfaces and (*d*) cases of osteomyelitis, necrosis and abscess about the ends of the fragments. Referring to the ivory peg method of Dieffen-

back and its modifications without approval, he describes Brainard's method of perforating the fragments with a small drill, and this failing, he would freshen the ends of the bone and unite the periosteum, uniting the fragments by wire suture or not, according to the exigencies of the case, all with antiseptic precautions. Cases in which this can not be done because of excessive loss of bone substance, should be treated by bone transplantation according to the methods of Macewen or von Nussbaum.—*N. Y. Med. Jour.* 1886. Feb. 6.

J. E. PILCHER (U. S. Army.)

GYNÆCOLOGICAL.

I. The Recurrence of Parovarian Cysts After Simple Puncture. By M. TERRILLON (Paris). In a rapid review of the subject it was established that MM. Panas and S. Duplay's observations in support of the definite cure of these cysts by simple puncture, referred to tests which had not been followed long enough. Kœberlé first and then MM. Lucas-Championniere, Terrier and Polaillon maintained that simple puncture was most often only palliative and that ovariectomy had to be resorted to. This was also M. Terrillon's opinion and he supported it by seven observations of his own, by the results of the résumé of observations published up to the present, made in a thesis by one of his pupils. In all his observations, M. Terrillon, from the fluid analyzed, showed the characteristic composition, limpidity, little solid residue and absence of free albumen.

Obs. I. *Parovarian cyst. Two punctures. No return six months after.* Woman æt. 51. Observed the tumor two and a half years. Sept. 5, 1883, puncture; gave 13 litres of pale yellow fluid; Oct. 1884, a second tapping gave 11 litres of the same liquid. Six months afterwards, no appreciable return.

Obs. II. *Parovarian cyst. Two punctures. Recurrence probable.* Puncture. Apparent cure for seven or eight months. Second tapping October, 1884. On recent examination a slight commencing tumefaction.

Obs. III. *Parovarian cyst. Puncture. Return. Ovariectomy. Cure.* Woman æt. 24. The tapping gave 8 litres of limpid liquid. Return in fifteen or eighteen months. Ovariectomy. No adherence; no pedicle;

peeling off from the broad ligament easy enough; Fallopian tube and ovary removed with the cyst. The intra-abdominal wound was constricted by suture with several threads and left in the abdomen. The patient left the hospital quite cured in five weeks.

Obs. IV. *Parovarian cyst. Puncture. Return. Ovariectomy. Cure.* Woman æt. 32. Puncture. Return in twenty-two months. Ovariectomy. Operation rather difficult; had to give up the removal of the whole sac; the borders of the part left sutured to the abdominal wall. It retracted so rapidly that the patient left cured on the twenty-fifth day.

Obs. V. *Parovarian cyst. Puncture. Return. Ovariectomy. Cure.* Woman æt. 31, married. After the second tapping, examination of the abdomen revealed the existence of a second cyst and of uterine fibrous bodies. Another recurrence took place, when ovariectomy was performed and the patient cured.

Obs. VI. *Parovarian cyst. Two tapings. Return.*

Obs. VII. *Parovarian cyst. Puncture five months ago. No actual return.*

In considering these observations with all those published, which do not give more than ten or twelve cures by simple puncture in cases which have been watched for a long enough time, one may say that in parovarian cysts, cure by simple puncture is rather the exception and recurrence after the tapping the rule.

M. DESORMEAUX has been able to observe sufficiently long three patients who have remained cured of parovarian cyst; two after puncture and iodized injection, and one by spontaneous inflammation and disappearance.

M. TERRIER had seen but one case of cure after puncture, and M. Terrillon's communication only confirmed his ideas. He was astonished at hearing of parovarian cysts included in the broad ligament. Neither himself nor MM. Lucas-Championnière and Perrier had met such—there was always a pedicle more or less broad.

M. TERRILLON. The cases of inclusion in the broad ligament are very rare, but there are examples in the work of Hégar and Kaltenbach.

M. TERRIER remarked that some patients remain cured for years after puncture of a large cavity of a multilocular cyst. He had ope-

rated three years after puncture on a dermoid cyst of the ovary, the patient having had two children in the interval. He had several times seen a multilocular cyst remain stationary after puncture—there is generally in these cases a large cavity and a small polycystic mass.

M. TH. ANGER had twice performed ovariectomy for parovarian cysts refilling after puncture. One of the patients was cured, the other died. In the last the ovary, quite distinct from the cyst, was left in the abdomen; it became inflamed, severely painful, and at the autopsy was found peritonitis and a suppurating ovaritis.

M. CHAUVEL had seen again this year a patient who had been tapped in 1882 for a parovarian cyst and who presented no trace of a return. She was before the Society in July, 1882.

M. POLAILLON in 1880 punctured a parovarian cyst which gave 8 litres of pure limpid liquid. The woman seemed cured for 3 years, then abdominal pains came on, and ovariectomy was performed five years after the puncture. The cyst was sessile and not included in the broad ligament, the base could not be removed and was sutured to the abdominal wall. The patient was cured by suppuration and retraction of the cavity.

II. Vaginal Hysterectomy for Cancer. By M. TRÉLAT (Paris). The case of a woman *æt.* 38, who had had six children and two miscarriages. Last winter complained of dulness and wasting. Chronic metritis recognized. Some months afterwards a recent epithelioma of the neck of the uterus was recognized. The uterus large and very mobile. Vaginal hysterectomy was decided on, because of the recent onset of the affection, which gave more hope of survival, and of the size of the uterus, which led one to fear its encroachment.

Operation July 2. The patient sat up the second day. The first tube was removed on the fifth and the second on the eighth day, with all the vaginal dressings; then only washings of perchloride solution soon replaced by chloralized water, because of the smarting and irritation produced by the perchloride. The patient had been up now for five days, and would be considered as cured.

From the operating points of view, the pulling down of the uterus was very easy, as well as its separation from the bladder and rectum. To enter the peritoneal cavity the cul de sac must be opened by a

pair of scissors, because the finger has greater tendency to tear than to perforate. The uterus was very large, and could not be circumscribed with the finger; but with difficulty it was possible to pass the ligatures round the broad ligaments, and this is certainly the most laborious part of the operation, and requires modification. Before dividing the broad ligament it must be secured by three or four ligatures in chain, to combat its elasticity, which, in this case, caused the ligatures of the two sides to slip, after division of the ligaments, so that it became necessary to ligature separately all the vessels which were exposed.

Two histological examinations at the College of France and at the Charité showed the existence of a prominent epithelioma, lobulated horny and mucous, limited to the inferior third of the neck. The patient is, therefore, in the best condition for a permanent cure.

M. TERRIER gave some details of a second vaginal hysterectomy which he had lost. The friability of the neck had rendered the pulling down very difficult and fruitless; even after freeing it before and behind, traction of the body by Museux' forceps only brought it down after destruction of the cellular adhesions which held it at the back. The broad ligaments were divided after placing on each two ligatures in chain, which was insufficient. However, on careful examination, the stoppage of hæmorrhage seemed perfect. Drainage and iodoform dressing were employed. As an accident of the operation, an omental hernia was produced. For three days the patient progressed well, in spite of rapid pulse and disturbance; then a pallor of the face was observed, indicating internal hæmorrhage; the condition became worse, and the patient died on the seventh day from subacute peritonitis. At the autopsy a litre of blood was found in the peritoneum, the hæmorrhage coming from the upper part of the left broad ligament of which the ligature had given way. In this case M. Terrier regretted that he had only used two ligatures for the broad ligaments instead of three at least, and that he had employed, instead of simple silk, silken cord, which fastens badly and does not remain tight. As regards the hæmorrhage, it is especially necessary to guard against the vaginal arteries, altogether at the lower part of the broad ligament, which may easily escape. The specimen showed epithelioma of the

neck, some doubtful portions had been left, and the glands were enlarged up to a certain height of the broad ligaments.

III. Removal of Two Sessile Cervical Fibroid Tumors by Abdominal Section. By F. A. KELLEY, M.D. (Philadelphia). The operation was done as a forlorn hope to relieve a patient rendered desperate by protracted hæmorrhage and abdominal pains, caused by two fibroid tumors of the cervix uteri, an operation for the relief of which had been refused by several distinguished surgeons. On abdominal section the tumors were found to be broad-based flat fibroids, deep down in the areolar tissue. The peritoneum was incised and stripped off from the tumors which were then enucleated and torn loose with an ecraseur. The free hæmorrhage following their removal was controlled with a Pacquelin cautery, ligature at such a depth in the pelvis being impracticable, and the cauterization itself being very difficult, and rendered justifiable only by an accurate knowledge of the anatomy of the parts. The toilet was made with great care and the abdominal wound closed by silver sutures, leaving a curved drainage tube about a half inch in diameter at the lower angle, draining the retro-uterine cul-de-sac. Through this tube the pelvis was irrigated daily with warm carbolized water, to which the writer attaches the utmost importance in securing the favorable result.—*Am. Jour. Obstetrics.* 1886. Jan.

IV. Artificial Vesico-Vaginal Fistula for the Cure of Chronic Cystitis. By Dr. A. V. MACAN (Dublin). With the same success that has attended perineal drainage of the bladder, the author has made a free opening between the base of the female viscus and the vagina in two cases. The first is especially noteworthy from several points of view.

A woman, æt. 38, had suffered for five years from a vesico-vaginal fistula (high up), as a result of severe labor. A large calculus had formed (owing probably to the stagnation of urine below the fistula), which was removed with much difficulty through the urethra by the use of lithotrixy and Bigelow's evacuator. Three months later Dr. Macan succeeded in closing the fistula after two operations; but as chronic cystitis came on and resisted all ordinary treatment, the vesico-

vaginal septum was divided and the two mucous membranes sutured in order to prevent both hæmorrhage and premature disuse of the wound. Much thick membrane, due to the irritating action of the urine, was subsequently removed from the vagina below the fistula. The cystitis gradually subsided, and in February, 1885, the opening, which had existed for four months, was closed. "The cystitis was thoroughly cured."

The writer observes that had he known the size of the stone he would have performed vaginal lithotomy in preference to lithotripsy. —*Dublin Journal of the Medical Sciences*, October, 1885.

SYPHILIS.

I. Syphilitic Pseudo-Paralysis in Infants. The recorded cases of this obscure and rare affection are chiefly due to French observers, especially MM. Parrot and Dreyfus, Valleix in 1834 being the first to notice it. In the present clinical review it is asserted that there are always present certain features which help in its diagnosis from infantile and diphtheritic paralysis. These are (1) occlusive limitation to the extremities (generally to both upper ones), (2) pain and more or less swelling (especially towards the end of the affected limb), (3) good muscle-reaction to electricity and perfect retention of sensation. Several of the infants presented evidence of inherited syphilis (including swelling at the epiphyseal lines in the "paralyzed" parts), in other cases syphilis was inferred from the parents' history, whilst a third group included instances of powerlessness in a limb after one of its chief bones had been fractured or some other traumatism sustained. In the latter syphilis was assumed as a hidden cause. This surely seems unnecessary. The inability of young children to localize the pain felt after a traumatic lesion of arm or leg (e. g., fractured clavicle or displacement of the articular ligament) and the resulting powerlessness of the whole limb, are matters of every day observation.

The paralysis in the more undoubted cases comes on insidiously during the first few months of life, and has been twice noted at birth out of a total number of fourteen cases mentioned by Dreyfus. It usually persists until the infant's death, a fatal issue being almost constant in those affected at the hospital in which M. Parrot made his

well-known researches. If, however, mercurial treatment is carried out, with great care as to feeding and hygiene, it appears that several cases had recovered. M. Millard asserts that these infants tolerate well mercury given by the mouth (in the form of *syrup de Gibert*).

It may be that many of the cases of "syphilitic pseudo-paralysis" are of a reflex nature and due to weakness or actual displacement at epiphyseal line, and this view is confirmed by the greater frequency of the affection in the upper limbs. Both the cause and the effect may be at times symmetrical.—*Progrès Médicale*. 1885. Nov.

II. On the Recurrent Chancre, Etc. By J. HUTCHINSON, F.R.S. (London). A fact of importance from several points of view was almost simultaneously noticed by M. Hutchinson and Professor Fournier (London Hospital Reports, 1866, and *Archiv. Gén. de Méd.*, 1868), that syphilitic subjects may, at a varying period, from infection, usually a few years, present indurated sores which so closely simulate fresh Hunterian chancres as to mislead even careful observers.

The recurrent chancre ("pseudo-chancre induré" of Fournier) is nearly always solitary, and is usually situated on the prepuce or some other part of the penis, though it has more than once been observed on the scrotum. There is of course no reason why it should not occur on the site of extra-genital primary sores, and in one of the author's cases it was found in the scar of a former vaccination-chancere. A bubo is a very rare accompaniment, but in other respects the resemblance is very close, the sore being sometimes very hard, as a rule rounded or oval, and secreting little if at all. The recurrence is never followed by the appearance of secondaries, may develop without the least fresh exposure to contagion, may be accompanied by other late or tertiary lesions, and, as a rule, quickly subsides under specific treatment. It may, however, relapse again and again. It is an interesting example of what Mr. Hutchinson has urged for long with regard to the phenomena of the tertiary stage, that they are often a sort of relapse or re-development in the site of early manifestations of syphilis (e. g., secondary periostitis and tertiary periosteal gummata).

It is of importance to remember in practice that the penis is no more exempt from tertiary ulcers and indurations than is any other part of the surface of the body.—*Medical Press*. 1885. October 28.

III. Treatment of Syphilis with the Aid of Sulphurous Waters. By MM. LAMBRON and DOIT. The late M. Lambron and his successor have published the results of their extensive experience at the springs of Luchon; and although nothing really new will be learnt from them as to the methods of treatment, it is interesting to note how far they confirm the prevalent ideas as to the use of sulphurous waters. Mercury and iodide are respectively their main supports in the treatment of early and late syphilis, sarsaparilla is prescribed with each, and frequent sulphurous baths and potions are added, the latter being taken at the same time in the day as the specific drugs. Prolonged treatment (at intervals for two years at least) is advised. The iodide is at first given in seven grain doses, and its taste, as of the nauseous bromide of potassium, is to a great extent concealed by the use of strong syrup of bitter orange-peel. From personal experience the annotator can confirm this statement, and it is a pity that the preparation has not been transferred from the French pharmacœpia to our own.

The authors agree with the old doctrine that a day at the mineral baths acts as a touchstone to reveal latent syphilis, that the use of the waters increases the specific effect of mercury and iodide, whilst it aggravates primary sores or acute secondary lesions. Mercurial salivation and syphilitic cachexia are both improved by a visit to Luchon; and when mercury has been given for long and seems to have lost its effect the use of sulphurous waters will, it is asserted, "break up the combination of albumen and the metal" and set the latter free to act. It will be noticed that these conclusions are hardly more free from apparent contradictions than those of former observers.—*Gaz. des Hôpitaux*. Oct. 24 and 31. 1885.

J. HUTCHINSON, JR. (London).